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To: <taboomerslc@yahoo.com>
Date: Friday, October 22, 2004 4:45:26 PM
Subject: Kennecott Cleanup Information

*Please file
M/035/002*

Tom-

This email is in response to our discussion earlier this week and your request for some documents and lists.

1. I have attached copies of the responses to your 8/24/04 list of questions, the cover letter which I sent to you on 9/20/04 along with the responses, and the cover letter which was sent to the members of the Legislative Management Committee along with the responses to your questions.
2. Also attached to this email are the lists of members of the Stakeholder Forum and the South-End Technical Review Committee for the Kennecott cleanup.
3. You also asked for information regarding a federal consent decree regarding Kennecott cleanup and the opportunity for public comment. There is a draft Remedial Design Consent Decree (RDCCD) under discussion by EPA/Justice Dept., Kennecott, and DEQ. You will recall that the earlier groundwater plan and agreement dealt with the 1995 Natural Resource Damage Consent Decree (NRDCCD) for groundwater cleanup. In addition to that NRDCCD, EPA has a responsibility under CERCLA to establish, with Kennecott, Remedial Designs for other cleanup work. The RDCCD is draft and under negotiation, so EPA considers it confidential at this stage. There is a 30-day public review and response period when EPA provides the proposal to the federal court, prior to the decision by the court regarding RDCCD. We are talking with EPA about the value of a discussion (perhaps a Stakeholder Forum - Technical Review Committee joint meeting, open to the public as are all meetings of these groups, similar to the one we held in conjunction with the NRD work), but EPA has not made a decision yet. If you have additional questions, Eva Hoffman, EPA, would be a good contact (303-312-6764). I hope this information meets your needs. You can contact me or Doug if you have questions. Thanks. Dianne Dianne R. Nielson, Ph.D.

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0003

**RESPONSES TO QUESTIONS SUBMITTED BY LANCE CONSULTING GROUP
(TOM BELCHAK) ON AUGUST 24, 2004**

Questions Posed to Joint Group

1. *Do you as NRD Trustee feel the settlement under the Consent Decree was sufficient? Why or Why not.*

Response: Yes. The Consent Decree established options for cleaning up or replacing the contaminated groundwater for the benefit of the public in the Affected Area, required Kennecott to provide Trust funds to accomplish that objective, and enabled the groundwater cleanup to proceed in coordination with other state and federal cleanup requirements.

2. *How much additional cost will be transferred to the ratepayers and taxpayers under this Joint Proposal?*

Response: The Trust Fund consists of damages paid by Kennecott when the Consent Decree was approved, together with the accumulated interest since that time. It pays for the treatment of contaminated groundwater. The costs for cleaning up the contamination are not "transferred" to ratepayers, and no additional costs will be "transferred to taxpayers. The Jordan Valley Water Conservancy District (JVWCD) is required to pay for the costs that would otherwise be incurred to produce water absent contamination, such as drilling, pumping, and distribution. See Section 9 of the Joint Proposal for a description of project costs and funding. Also see Comment Response Summary, Response to Common Comment No.12.

3. *Why do you think it is acceptable for the public to be cleaning up the contamination caused by a private company?*

Response: The "public" is not cleaning up the contamination nor paying the cost for cleaning up the contamination. The Trust Fund established in the Consent Decree will be used to pay for treatment of contaminated groundwater. The Consent Decree enables Kennecott to work with a purveyor of municipal and industrial (M&I) water (Jordan Valley Water Conservancy District – JVWCD) to put treated water to beneficial use. Under the terms of the Consent Decree, the Trustee has also approved the use of the cash portion of the Trust Fund by JVWCD to treat contaminated groundwater.

4. *Why is JVWCD (Jordan Valley Water Conservancy District) a quasi-governmental agency, treating Kennecott's contamination? Could JVWCD by treating this contamination be taking on a liability caused by KUCC?*

Response: See response to question No. 2 above. The mission of JVWCD is to develop and deliver public water supplies to the public. JVWCD's participation in the Joint Proposal project accomplishes this mission and facilitates the restoration of the JVWCD groundwater rights that were damaged in the Affected Area. Kennecott will indemnify JVWCD from environmental liabilities. See the Project Agreement, Article 12.6.

5. *Why is JVWCD reimbursing KUCC its capital costs to treat KUCC's contamination? Project Agreement sections 10.1 (b), (c) 11.2(c)*

Response: Section 10(b) of the Project Agreement provides for JWCD to pay avoided capital costs that it would have incurred in developing groundwater absent contamination. This is consistent with the Consent Decree. See the Consent Decree Supporting Document, Attachment 16. Section 10.1(c) of the Project Agreement provides for reimbursement to Kennecott for capital funds for the Lost Use Facilities that Kennecott will advance to JWCD during construction. This advancement of funds by Kennecott allows for the Letter of Credit to remain intact while construction of the facilities proceeds. Section 11.2(c) is a provision dealing with termination.

6. Why is the Irrevocable Letter of Credit being split to 2 letters of credit? Does this violate the consent decree which only states 1 letter of credit?

Response: The original Letter of Credit (ILC) is being replaced with 2 ILCs in order to provide funding to treat contaminated groundwater pursuant to two separate treatment plants. Replacement of the original ILC with the Zone A and Zone B ILCs is consistent with the terms of the Consent Decree. See also Response to Common Comment No. 12.

7. Why is the rate on the Irrevocable Letter of Credit being reduced from the Consent Decree stated rate of 7% to the Utah PTIF rate of approx. 1.5%? Could this be construed as a violation of the trustee's fiduciary duty to the State (public) as giving benefit to the polluter (Kennecott)?

Response: Kennecott has committed to complete and fund the Joint Proposal in an amount that is in excess of the stated value of the letter of credit. Because of that, the form and interest rate for the letters of credit does not adversely affect the value of the commitment that the Trustee has received on behalf of the public. That being said, under the proposal, the interest rate is not being reduced on the \$28 million Letter of Credit (ILC). Instead, in accordance with the terms of the Consent Decree, that original ILC is being replaced by two new ILCs, one for the Zone A facility and one for the Zone B facility, to cover construction, and operation and maintenance. The 7 percent interest rate only applies to the original ILC. These provisions are consistent with the Consent Decree and the Trustee's responsibilities. See also Response to Common Comment No. 12.

8. How much water is required to provide the 8235 acre-feet per year of municipal quality water to the affected area? Executive summary 1.1

Response: Table 5.4A in the Joint Proposal, entitled "Treatment Plant Flows," shows the feed water required to produce 8,235 acre-feet of treated water.

9. Why is there a discrepancy between the executive summary 1.1 and section 2.1 of the Joint Proposal which says that by treating with the Reverse Osmosis process at 85% efficiency that the Joint Proposal will provide 7000 ac ft/yr. Which is it 7000 or 8235?

Response: There is not a discrepancy between sections 1.1 and 2.1 of the Joint Proposal. These sections describe two components of treated water to be produced annually, 7,000 acre-feet per year and 1,235 acre-feet per year. Section 2.1, paragraph 7, describes the original Consent Decree assumption that 7,000 acre-feet per year would result from treatment of 8,235 acre-feet per year of extracted deep groundwater. The 1,235 acre-feet was assumed to be lost as a reverse osmosis concentrate stream. The Joint Proposal project will provide 7,000 acre-feet per year from treatment of deep groundwater. The Joint Proposal project will also provide 1,235 acre-feet per year of treated water, to restore the assumed loss of 1,235 acre-feet, by treatment of other sources. See the Consent Decree Supporting Document, Section VIII A.

10. *How is the affected area determined? What is the equivalent benefit to the public for being impacted by the contamination.*

Response: The Affected Area is defined in the Consent Decree and based on the extent of contamination, as discussed in the Supporting Document to Consent Decree. The benefit for the public in the Affected Area includes extracting contaminated groundwater and restoring the aquifer for future use, limiting the spread of contamination, and providing municipal quality drinking water. Well owners who have been impacted by contamination may have individual claims. The Trustee does not have the authority to address claims or benefits related to the interests of third parties.

11. *Why is the reverse osmosis process the preferred method of treatment if it is only up to 85% efficient?*

Response: The use of reverse osmosis (RO) technology to treat the sulfate-contaminated water has been well documented and demonstrated to be a reliable method of water treatment. As part of the CERCLA Remedial Investigation and Feasibility Study (RI/FS), Kennecott evaluated over 40 different remediation technologies, combinations of technologies, and alternatives. An evaluation of these technologies was presented in the Feasibility Study for Kennecott Utah Copper South Facilities Groundwater Plume, dated March 16, 1998 – Version B. This document is available from the DEQ. During the RI/FS evaluation, a number of other technologies were evaluated and eliminated from further consideration due to technical, economic or environmental considerations. RO was pilot tested and determined to be the best method to achieve the desired results and satisfy the remedy selection criteria listed under CERCLA and the Consent Decree.

12. *Does Kennecott receive any benefit of the acid water sent to the tailings pond?*

Response: Kennecott extracts water from the acid plume under approved water rights as listed in Table 7.2C of the Joint Proposal. These water rights have been approved for both municipal and industrial uses. Acid plume water is delivered to the tailings line where it is neutralized by excess neutralizing capacity of the tails or by addition of lime directly to the tailings line. Kennecott recycles the majority of water reporting to the tailings impoundment, including acid plume water, back through the process water circuit. Thus, there is a beneficial use of this water by Kennecott. The acid plume water is further discussed in Response to Common Comment No. 5 of the Trustee's Comment Response Summary of August 31, 2004. As described in that response, management of the acid-contaminated water associated with the Zone A Plume is part of the CERCLA remedial response. See also response to #24.

13. *If the Joint Proposal is approved and the contaminants are sent to the Kennecott tailings pond, what happens when Kennecott shuts down and leaves?*

Response: At the time of mine closure, Kennecott will close the North Tailings Impoundment according to the Mining and Reclamation Plan approved by the Division of Oil, Gas and Mining (DOGM). Kennecott has posted financial assurance (\$20.68 million) with the DOGM to guarantee closure and reclamation of the tailings impoundment in accordance with the approved plan. Closure will entail revegetation of the impoundment to restore beneficial use of the land as well as mitigate dust and erosion.

It is possible that mining operations will cease prior to fulfillment of Kennecott's 40-year water treatment obligation under the Joint Proposal. If closure occurs before Kennecott's obligations are completed, Kennecott will seek to modify its UPDES permit to allow direct discharge of reverse osmosis treatment by-products to Great Salt Lake. If direct discharge to the Lake is not allowed, the project agreement contains provisions for an Alternative Disposal System to be investigated and implemented.

14. *Who is paying for the pipeline to the Kennecott tailings pond? Kennecott or the public (taxpayers and ratepayers)*

Response: It is assumed that this question pertains to the concentrate discharge pipeline from the Zone B reverse osmosis treatment plant. JWCD will pay for this pipeline, utilizing funds from the Trust Fund.

15. *Do you believe the State should institute proceedings and reopen negotiations as available under the Consent Decree because of the abundance of new information that has surfaced regarding costs, contamination etc. showing the settlement was too little?*

Response: The Consent Decree should not be reopened. The Trustee has determined that the project identified in the Joint Proposal, 3-Party Agreement and Project Agreement meets the requirements of the Consent Decree. The Trustee, Kennecott, and Jordan Valley Water Conservancy District have determined that the project can be implemented as defined in the Joint Proposal and implementing agreements.

16. *How much water is in the aquifer that has been contaminated by Kennecott?*

Response: Kennecott has calculated that a volume of 171,000 acre-feet of groundwater in the southwest Jordan Valley contains sulfate at concentrations greater than 1,500 mg/L. See "Remedial Investigation Report for Kennecott Utah Copper South Facilities Groundwater Plume," March 16, 1998, Section 4.4.

17. *Why is Jordan Valley Water Conservancy District the only purveyor considered? Have others been explored? What about the affected area?*

Response: Kennecott Utah Copper Corporation selected Jordan Valley Water Conservancy District (JWCD) as the purveyor of the treated water. JWCD's involvement in the Joint Proposal is consistent with the Consent Decree provisions.

18. *What did Jordan Valley Water Conservancy District do with the settlement they received from the Consent Decree? Was it put to beneficial use for the public (ratepayers) to deal with this contamination?*

Response: JWCD's settlement with KUCC was not part of the Consent Decree. The cash portion of the settlement was used in part to reimburse JWCD's legal expenses in intervening and negotiating the 1995 Consent Decree. The remaining funds were placed in JWCD reserve accounts, to allow for future construction of project facilities. The water rights involved in the settlement have been transferred to JWCD ownership, have received approval for a change application, and are now in JWCD inventory for meeting future water demands of the public.

19. *Has the Attorney General reviewed this Joint Proposal, Project Agreement, Agreement Among Parties and compared it to the Consent Decree?*

Has he given written approval or disapproval as it relates to the Consent Decree?

Response: The Utah Attorney General has assigned Fred Nelson, Assistant Attorney General and Division Chief of the Environment Division of the Attorney General's Office, to provide the legal services to the Utah Department of Environment Quality and the Trustee on this matter. He has reviewed the Joint Proposal and associated agreements and agrees with the Trustee that the Joint Proposal and agreements are in compliance with the provisions of the Consent Decree. He has so advised the Trustee. He concurs in the Findings and Conclusions of the Trustee issued by the Trustee at the time of approval of the Joint Proposal.

20. Does the Attorney General agree that the public should be cleaning up the contamination of Kennecott, a private polluter?

Response: The question incorrectly assumes that, under the Joint Proposal, the public is funding the clean up of contamination that is the responsibility of Kennecott. See also the response provided to question No. 3 above. The Attorney General supports the provisions of Utah and federal law that establish responsibility on the discharger for cleanup of resultant contamination.

21. Is the NRD Trustee the final authority as it relates to the acceptance or denial of the proposal?

Response: Yes

22. Is the NRD Trustee aware of any past or current violations of the Consent Decree?

Response: The Trustee is not aware of any past or current violations of the Consent Decree.

23. Provided that the required thermal energy for distillation is available at little or no cost, would not distillation be a more flexible and reliable method of treatment than reverse osmosis?

Response: JVVCD has evaluated distillation. As noted in the question, distillation does require a significant amount of electrical or thermal energy. The question refers to thermal energy being available at "little or no cost." JVVCD is not aware of "little or no cost" thermal energy. Distillation is a more expensive technology to operate than reverse osmosis. JVVCD has evaluated distillation and has found it to be no more flexible or reliable than reverse osmosis.

24. Is not the use of treated water from the low pH portion of the plume in Kennecott's tailing transport line a beneficial use of water to Kennecott by providing a portion of the transport water, violating Section V, part D, paragraph 5 of the Consent Decree. It appears that none of these waters should apply towards a credit to Kennecott.

Response: Section V.D.5 of the NRD Consent Decree states that "Kennecott shall not receive or beneficially use any of the surface water or ground water resources provided to the public, and which are developed for credit or developed by expenditures of the Trustee".

The acid plume water is not a component of the ground water resources to be provided to the public under the Joint Proposal and is not being developed for credit against the Trust Fund; therefore it is not subject to the provisions of Section V.D.5. As mentioned above, the CERCLA remedial response and not the Joint Proposal address management of the acid water. Water to be provided to the public under the Joint Proposal is not derived from the acid plume water but includes the 3,500 acre-feet per year from the Zone A plant and 3,500 acre-feet per year from the Zone B plant. See also response to #26 below.

25. Section V "Covenant by Kennecott and payment to the Trustee" outlines all remedial actions to be taken. There is never a mention of any other party than Kennecott that is required to take any actions. Why then is the District jointly proposing treatment options which incorporate the use of District funds.

Response: Paragraph V.D.2.b of the Consent Decree distinctly states, "If Kennecott provides and delivers municipal quality water through treatment of contaminated water to a system of a purveyor of municipal and industrial ("M&I") water in a manner acceptable to the Trustee...." The Jordan Valley Water

Conservancy District is a joint party to the approved project because Kennecott Utah Copper Corporation selected this entity as the purveyor of the treated water.

As stated in Response to Common Comment No. 12 of the Trustee's Comment Response Summary (CRS), it is proposed that the Trust Fund be used to construct two reverse osmosis treatment plants. In return, a certain quantity of municipal quality drinking water will be provided to the public in the Affected Area as required under the Three-Party agreement (3500 acre-feet from Zone A and 3500 acre-feet from Zone B). Kennecott (either through direct funding or via the use of Trust Fund reductions) is paying for the construction of the treatment plants and their ongoing operation. In essence, this funding mechanism pays for the treatment of contaminated water.

As stated in Response to Common Comment No. 11 of the CRS, the majority of the funds the District is contributing to the project are for activities undertaken to produce water with a lower TDS than required by the Consent Decree and attributable to costs it would otherwise incur to obtain the water absent contamination. As an example, the costs associated with the normal development of a well to extract groundwater (absent contamination) are covered by the District through their water rate structure.

26. To date, how much water has been removed from the "Metals Plume"? Is water still being removed? Is the amount 400 acre feet on a five year average to comply with Section V, paragraph B of the Consent Decree?

Response: Kennecott has met and exceeded acid plume extraction requirements of Consent Decree Section V.B. Extraction volumes have been reported to the Trustee. See also the Trustee's August 31, 2004 Findings and Conclusions in regard to Consent Decree Section V.B. Kennecott also presented information on annual extraction volumes and future anticipated extraction rates to a joint Technical Review Committee-Stakeholder Forum on June 16, 2004. A copy of Kennecott's presentation may be found at http://www.deq.state.ut.us/issues/nrd/Kennecott_Payne_6-16-2004.pdf.

27. With the proposal, are not the waste products still simply being discharged to the Great Salt Lake only with increased expense to the District to construct a waste line to Kennecott's tailings pond?

Response: The Trustee has acknowledged the District's willingness to delay a decision on how best to dispose of the by-product water from the Zone B facility. See Comment Response Summary, Response to Common Comment No. 6. The outcome of the Great Salt Lake Water Quality Steering Committee investigation of the fate and transport of selenium in the Great Salt Lake and the development of a numeric selenium standard will assist the District to render a decision on which treatment and disposal option to select. The District will also consult with the Trustee and the EPA while rendering this decision.

Of the three treatment/disposal options, two would direct the by-product water from Zone B to the North Tailings Expansion Impoundment. The third (or "Separate Design") would direct the by-product water directly to the open waters of the Great Salt Lake under a UPDES permit. The North Expansion Impoundment does have a UPDES discharge permit for periodic discharges by Kennecott from the impoundment to the Great Salt Lake. Please note that the majority of water reporting to the impoundment is recycled back to Kennecott's process water circuit. During very wet times (spring run-off and late fall) Kennecott does make use of its permitted right to discharge some of the excess water to the Great Salt Lake. However, they perform this discharge while meeting the permit limits, which act to protect the beneficial uses of the receiving water body. If the District opts to select the "Separate Design," the District will apply for a UPDES permit and will be required to meet the permit limits placed upon the discharge of Zone B by-product water.

Kennecott is reimbursing the District for the costs to construct the Zone B facilities in exchange for the reduction to the Zone B ILC, as described in Response to Common Comment No. 12. The Trustee has also approved the use the cash portion of the Consent Decree Trust Fund to fund treatment of shallow groundwater or other groundwater at the Zone B facility. The cash portion will be used to make up the water lost during the reverse osmosis process. The costs associated with building the disposal pipeline are part of the costs associated with building the treatment facility to address the replacement of lost water.

28. *Why has there not been any consideration of REMOVAL of the waste products of concern to a controlled repository instead of discharge back to the environment?*

Response: Many treatment processes were evaluated during the Remedial Investigation and Feasibility Study (RI/FS) process conducted by Kennecott under the direction of EPA. Reverse osmosis was selected as the most feasible process. Subsequently, JVWCD considered a number of by-product (concentrate) disposal options, including removal of salts prior to discharge and no discharge alternatives. Six technical memoranda are available on the DEQ web page under "Stakeholder Process" for the April 14, 2004 meeting. These memoranda discuss the technical challenges and costs of removing salts and metals from the reverse osmosis by-product and disposing of the salts to a municipal landfill.

29. *When it is simply stated in the Consent Decree that Kennecott is to provide municipal quality water at no more than \$49 an acre foot, with no other financial terms, why does the Joint Proposal seem to focus on elaborate financial agreements that involve substantial investments by the District?*

Response: Section V.D.2.b of the Consent Decree specifies that \$49 per acre-foot (in 1995 dollars, indexed over time) is to be paid by a water purveyor to Kennecott for operation and maintenance costs the purveyor would have incurred absent the contamination, for water that Kennecott treats and delivers to the water purveyor. This is provided in the Zone A portion of the Joint Proposal. The Consent Decree also contemplates capital cost participation by a water purveyor for capital costs it would have incurred in developing groundwater absent contamination. See Consent Decree Supporting Document, Attachment 16. The Joint Proposal is consistent with this provision. In addition, JVWCD has elected to treat water to a higher quality than that specified in the Consent Decree. JVWCD will provide the incremental capital, operation and maintenance costs for this treatment process enhancement. See Section 9 of the Joint Proposal.

30. *Explain the relationship of Kennecott Land to Kennecott Utah Copper. If there is a direct relationship, then is not Kennecott benefiting from the treated water if Daybreak development receives water from the District?*

Response: Kennecott Land Company is a wholly owned subsidiary of Kennecott Utah Copper Corporation. The water from the Zone A plant for which Kennecott is being given credit will go to the JVWCD to be provided to the public in the Affected Area.

Kennecott Land Company's Daybreak Development is located within the Affected Area. Municipal quality drinking water (culinary water) is being provided to businesses, and will be provided to residents of Daybreak, by the City of South Jordan through a contract that the City has with JVWCD. This arrangement for providing culinary water is similar to arrangements among businesses or residents and cities and JVWCD throughout the Affected Area. This arrangement operates independent of the source of the water. This arrangement is consistent with the provisions of the Consent Decree Section V.D.5 which states, "Kennecott shall not receive or beneficially use any of the surface or groundwater resources

provided to the public, and which are developed for credit or developed by expenditures of the Trustee pursuant to Section VD of this Decree." Additionally, the water provided by "expenditures of the Trustee" through the Zone B and Lost Use treatment facilities will be provided to the public by JVWCD in accordance with the Consent Decree.

31. The Trust Fund is specifically to be expended to "restore, replace, or acquire the equivalent of the surface or ground water resources for the benefit of the public in the Affected Area" (Section D, paragraph 1). With the proposed treatment, a substantial amount of water will be "wasted". There is no replacement, nor acquisition from other sources. In fact, there is not even restoration. To restore means to put back. All that is being done is removal of the water. What will be done to bring back the groundwater to its former (quality and quantity) state prior to the pollution? Is that not what restore means?

Response: The Trustee's Findings and Conclusions address the use of the Trust Fund and requirements for a reduction of the Trust Fund. Also refer to the Comment Response Summary Response to Common Comment No. 12.

The specific reference made by the commenter refers to the establishment of the cash portion of the Trust Fund and the Consent Decree specifies that it can be expended to "only restore, replace, or acquire the equivalent of the surface or ground water resources for the benefit of the public in the Affected Area..." Restoration, replacement or acquisition of the lost resource will take place as a function of the Joint Proposal approved by the Trustee.

The project proponents recognized in 1995 that the volume of contaminated water in the Affected Area equated to 8,235 acre-feet, safe annual yield. Under the Consent Decree, 8,235 acre-feet of municipal quality drinking water needs to be provided to the public in the Affected Area. As a function of treating the contaminated water utilizing reverse osmosis (RO), a portion of the water is lost as a by-product stream. After RO treatment of the deep aquifer through the Zone A and Zone B facilities, 1,235 acre-feet of water remains to be "restored, replaced, or acquired" to reach the full water production requirement of the Consent Decree. The selected shallow groundwater production project, using the cash portion of the Trust Fund, will replace this volume of water. The cash portion of the Trust Fund has been approved for use to replace the water lost during the treatment of deep groundwater impacted by mining operations.

The Trustee's approval of this project has now provided a means to protect non-impacted groundwater resources in this particular portion of the valley. This is accomplished by preventing the further migration of the two-contaminant plumes through extraction and containment. As the extraction program reaches its full production rate, the contaminants in the groundwater will be flushed and removed. Restoration of the aquifer will take place over time, as municipal quality drinking water is provided (replaced) for the benefit of the public in the Affected Area.

32. This Joint Proposal seems to be no more than a source development plan by the District, with only extraction and partial treatment. Where in this proposal is Kennecott solely providing restoration of the polluted groundwater to those in the Affected Area?

Response: The Joint Proposal meets the requirements of the Consent Decree, including the requirement to "restore, replace or acquire the equivalent of the damaged resource for the benefit of the public in the Affected Area." See Trustee's Findings and Conclusions. Under the Consent Decree, Kennecott is required to provide funds, to be held in trust, to accomplish that objective. The Consent Decree does not require Kennecott to solely provide restoration. In fact, in order to get credit under the Consent Decree,

Kennecott is required to work with a purveyor of municipal and industrial (M&I) water to provide the treated water to the public.

33. Could or should not Kennecott not only be treating and replacing the groundwater, but also providing municipal quality water. In other words, these two actions need not be from the same source, as in the Joint Proposal. Kennecott could treat the groundwater and re-inject it AND provide municipal quality water from their own sources of water in or around their operations.

Response: As noted in the response to question No. 32 above, the Consent Decree provides that the Trust Fund is available for projects that will restore, replace or acquire the equivalent of the damaged resource, provided various requirements set forth in the Consent Decree are satisfied. The Joint Proposal establishes a project whereby the contaminated groundwater is pumped, treated and provided for the benefit of the Public in the Affected Area. This type of arrangement meets the requirements of the Consent Decree.

34. What is the expected cost (per acre foot) for only pre-treatment and just treatment of Kennecott's contaminated groundwater, exclusive of capital costs and water conveyance?

Response: The average operation and maintenance treatment cost of Zone B and the shallow aquifer water for the three alternatives is estimated to be \$250 per acre-foot. See page 6-20 of Appendix H in the Joint Proposal.

35. What is the reason there has been no response to a request by the public for an analysis of the Consent Decree and an opinion as to compliance of the current joint proposal to the Consent Decree?

Response: The Trustee's Findings and Conclusions, issued on August 31, 2004, details the consistency of the Joint Proposal, Project Agreement, and 3-Party Agreement with the Consent Decree. It would have been premature for the Trustee to issue Findings and Conclusions prior to evaluating public comment on the proposal.

36. Is it the intent of the trustee to accept, reject or modify (ARM) the current Joint Proposal by the end of August? If so, will the comments and questions which the public asked last year be responded to prior to the "ARMing" of the Joint Proposal?

Response: Yes. The decision was announced and the Comment Response Summary was provided to the public on August 31, 2004.

37. If it becomes apparent that yield (extraction) of water from the aquifer in the southwest quadrant of the Salt Lake Valley is NOT sustainable, can NRD Trust Fund Dollars be released to Kennecott?

Response: Under the provisions of the 3-Party Agreement (Section I.C.1), Kennecott is obligated to provide and deliver from the Zone A Plant at least 3500 acre feet of water for an operational period of 40 years. No reduction in the Zone A ILC occurs until the Zone A plant is determined to be complete and operational with a demonstration that the water can be provided. A full release of the Zone A ILC is available only when Kennecott has thereafter demonstrated for 5 years that it can provide the required quantity of water. If, at any time, Kennecott fails to satisfy its contractual commitments under Section VII.B of the 3-Party Agreement, the Trustee has all remedies available at law and in equity, including the right to recover damages and to seek specific performance. If it is determined that the 3500 acre feet is not sustainable, depending upon when that determination occurs, either the ILC will not be released, or Kennecott will otherwise be required to meet its contractual obligations.

For the Zone B Plant, the Zone B ILC is released only as JVWCD becomes contractually committed to deliver water to the Affected Municipalities. If after the Zone B ILC is released, the extraction of the water is determined not to be sustainable, JVWCD is obligated to provide water from other sources.

38. How can the NRD Trustee be apprised of data to separate effects of drought and effects of excess groundwater withdrawals (extraction)

Response: As discussed in the Comment Response Summary, Response to Common Comment No. 13, the Trustee and members of the Technical Review Committee will continue to have an oversight role with the project as cleanup proceeds. The monitoring data that will be collected during cleanup activities will be used to reevaluate the aquifer's response to the extraction program and the effect this has on the contaminant plumes. The modeling information developed from the monitoring data will be used to optimize the extraction program to prevent the further migration of the contaminant plumes while mitigating excessive drawdown on the groundwater levels. As presented in Appendix D of the Joint Proposal, Kennecott's groundwater model has incorporated multiple variables into the model's functions to assess groundwater flow and contaminant transport. One of these variables is seasonal recharge, which is a function of the drought cycles experienced in the State of Utah. Groundwater extractions are another variable used by the model to interpret groundwater flow and contaminant transport. Also see Response to Common Comment No. 2 and No. 10 for further information.

39. Is there enough hydrogeologic data available to support a decision to extract an additional 7,000 acre feet of groundwater from the southwest quadrant of the Salt Lake Valley?

Response: Adequate hydrogeologic data exist to support the groundwater extractions required for this project. See the Trustee's August 31, 2004 Findings and Conclusions document, regarding Section V.D.2.b.iii of the Consent Decree. Additionally, the water required for the project will be withdrawn under approved groundwater rights and is consistent with the State Engineer's Water Management Plan for the Salt Lake Valley. The question incorrectly presumes that the Joint Proposal will require extraction of an additional 7,000 feet of groundwater.

40. Would JV's customers need to incur costs to build a pipeline to the Great Salt Lake if the groundwater was not contaminated?

Response: Previous studies described in Section VII.A of the Consent Decree Supporting Document identified background concentrations of total dissolved solids (TDS) in the Affected Area groundwater prior to contamination. In some portions of the aquifer, those background concentrations of TDS were substantially higher than the TDS water quality limit of 250 milligrams per liter that JVWCD has established for its municipal quality drinking water, and therefore would have required treatment. Absent contamination, JVWCD may have considered a reverse osmosis treatment plant with a by-product pipeline discharging into Great Salt Lake.

41. Would JV's customers need to incur costs to build a reverse osmosis plant if the groundwater was not contaminated by Kennecott?

Response: A reverse osmosis plant could have been considered. See response to question #40 above.

42-1. Would JV's customers need to incur costs to drill and pay for monitoring wells and other infrastructure to monitor the contamination plume if there was no groundwater contamination?

Response: No. Nor will JVWCD incur such costs in the Joint Proposal project.

42-2. Do Kennecott's existing permits allow receipt and storage of contaminated water from a third-party such as JV?

Response: Yes. Kennecott's permits allow for Kennecott's tailings impoundment to receive permeate and/or concentrate streams from membrane treatment facilities associated with the treatment of groundwater, meteoric water, leach water drain down or other sources of contaminated waters related to Kennecott operations. The waters being sent to Kennecott from the Zone B reverse osmosis plant are associated with the treatment of contaminated waters related to historic mining operations.

43. If Kennecott receives contaminated water from JV, will Kennecott, at some point, need to expand the ponds to allow for increased inflow?

Response: Kennecott's North Tailings Impoundment, process water circuit, and discharge outfall will readily accommodate the Zone B reverse osmosis by-product stream. The Zone B concentrate stream represents a 2% increase in impoundment inflow. See also the information presented to a joint Technical Review Committee-Stakeholder Forum on June 16, 2004 (http://www.deq.state.ut.us/issues/nrd/Kennecott_Payne_6-16-2004.pdf).

44. Does JV claim rights to any of the contaminated water in the aquifer? If so, at what point during the treatment process does JV claim ownership of the contamination?

Response: JVWCD holds underground water rights in the Affected Area, as described in Section 7.2 and Tables 7.2B and 7.2C of the Joint Proposal. These water rights provide JVWCD the right to extract water from its natural location in the aquifer, and do not pertain to any point in the treatment process.

45. If a pipeline rupture happens to the pipe transporting contaminated water from the reverse osmosis facility to Kennecott's tailings ponds, who is responsible for any environmental liability?

Response: JVWCD will construct and operate the concentrate discharge pipeline from the Zone B/Lost Use treatment plant, and will repair any rupture that may occur.

46. If it is determined that contaminated water from the JV reverse osmosis facility is allowed to be dumped into the Great Salt Lake, who is liable if, at some point in the future, it is determined that the contaminated water should not be discharged into the lake and some type of environmental fine is levied?

Response: The right to discharge to a surface water body is reviewed and granted by the Utah Pollution Discharge Elimination System (UPDES) permitting program, managed by the Division of Water Quality. Under this permitting program, an entity applies for a discharge permit providing the specifications necessary for the Division to review the potential for impact from the proposed discharge. By granting a permit, the Division places guidelines and site-specific limitations on the permittee, so that the discharge does not impact the beneficial use(s) of the receiving water body. It is the responsibility of the permittee to meet all guidelines and permit limits for the operating period. Each UPDES permit is reviewed and renewed, if appropriate, every five years. During this renewal time, the Division assesses the protectiveness of the permit limits and the ability of the permittee to comply with the permit.

48. Will the Daybreak project currently under development by Rio Tinto, Kennecott's parent company, receive treated water from JV if the reverse osmosis project is approved?

Response: See the response provided to question #30 above.

49. What price per AF will Daybreak pay for water received from JV?

Response: Daybreak Development has no contract for water deliveries from a water purveyor. See Comment Response Summary, Response to Common Comment No. 11. Residents of Daybreak Development will receive water service from South Jordan City. South Jordan City has a water purchase contract with JWWCD which provides this water. The water purchase contract between South Jordan City and JWWCD includes a water rate formula to allow the water rate to be recalculated each year. The current water rates for delivery to pressure zones 3 and 4 in South Jordan City, which includes a portion of the Daybreak Development, range from \$290.82 to \$308.25 per acre-foot for winter season deliveries, and from \$355.85 to \$373.28 per acre-foot for summer season deliveries. A price discount will be implemented for Zone A water deliveries under the Joint Proposal project, as described in Section 11 of the Joint Proposal. Some of this water may be delivered to the Daybreak Development residents by South Jordan City.

50. How does this price compare with prices charged to JV's other customers?

Response: The water rates for South Jordan City explained in the response to question #49 are comparable to those for other JWWCD member agencies. JWWCD wholesale water rates are recalculated for all member agencies annually using the same formula and methodology. The wholesale rates vary somewhat, depending upon peak delivery factors and pump lift costs by individual member agencies.

51. Will you please provide the contracts associated with water deliveries/sales to Daybreak, Rio Tinto, Kennecott, or any other Rio Tinto affiliate.

Response: The South Jordan City water purchase contract with JWWCD, described in the response to question #49, could be requested by submitting a GRAMA request to JWWCD.

Rio Tinto and Kennecott's affiliates have operations located around the world. Water delivery contracts and sales to these operations are proprietary, therefore contracts will not be provided. As explained in the response to question #30 above, there is no contract between Kennecott and the JWWCD to provide water to Daybreak. Delivery to Daybreak is through a contract between South Jordan City and JWWCD.

52. What is the alternate water supply for Daybreak if JV cannot deliver the requested amount?

Response: JWWCD has no direct contractual relationship with Daybreak Development. See the response to question No. 49. JWWCD delivers water from various water sources to its member agencies in accordance with water purchase contracts. These arrangements do not designate specific sources of water to any member agency. It is anticipated that the allocation of Zone A water for South Jordan City, as described in Section 11 of the Joint Proposal, will fall substantially short of the actual water demands in the higher-pressure zones of South Jordan City. Whether Zone A water is delivered at any given time by JWWCD to South Jordan City or not, JWWCD will deliver from any or all of its other sources. See Comment Response Summary, Response to Common Comment No. 11.

As described in response to question No. 30 above, the City of South Jordan will be providing culinary water to the Daybreak development.

53. *Has JV entered into any contracts with any supplier, contractor, or vendor that have breakage fees or liquidated damages associated with schedule delays if JV does not start and finish construction and commercial operation of the reverse osmosis facility by a certain date or within a certain timeframe?*

Response: No.

54. *Who is liable for schedule delays and cost overruns for the JV reverse osmosis plant?*

Response: JWCD is responsible to construct and operate the Zone B and Lost Use facilities in a timely manner, under schedule constraints that are defined in the Project Agreement.

55. *Will you please provide any contracts and agreements with any vendor, equipment supplier, or contractor regarding the proposed reverse osmosis plant.*

Response:

Zone A – No. Contracts and agreements between Kennecott and vendors, equipment suppliers and contractors relating to the Zone A Plant are proprietary.

Zone B – For Zone B and Lost Use facilities, JWCD has no existing contracts or agreements with vendors, equipment suppliers or contractors regarding the proposed reverse osmosis plant.

56. *How is it that the December, 2000 ROD (Record of Decision) called for treatment of the acid plume water from Kennecott's Zone A, but that was changed in the Joint Proposal to allow discharge of this hugely toxic water without treatment? What gives those preparing this proposal (and this provision still stands) the right to override the ROD?*

Response: The commenter's understanding of the requirements placed upon Kennecott to manage the extracted acid plume water, by the EPA Record of Decision (ROD) dated December 2000 and the Joint Proposal (June 2004) is not accurate. The U.S. EPA Region VIII, under its CERCLA authority, is addressing the management and disposal of the acid plume water located in Zone A. The Trustee's recent action does not address the management of the acid plume water, except for Kennecott's performance requirement to meet the extraction designated in the 1995 Consent Decree.

The ROD at the time of its completion made recommendations to Kennecott on how it was to address the remediation of the Zone A acid plume water. These recommendations were then taken under advisement while Kennecott continued to perform pilot tests on two treatment alternatives proposed for use under the remediation proposal, nanofiltration and reverse osmosis.

During the development of the Remedial Action/Remedial Design, Kennecott recognized certain limitations to the nanofiltration process and proposed to EPA and DEQ, via the Technical Review Committee (TRC), that they could meet their CERCLA remedial action requirements on the acid plume by extracting the water and neutralizing this water (prior to disposal) via the neutralization capacity of the tailings slurry and/or by the addition of lime. The change was proposed to the TRC and ultimately adopted by the EPA under the CERCLA authority in April 2003. This change in the CERCLA remedial design was acknowledged and documented by EPA's Explanation of Significant Difference signed by EPA in April 2003. EPA adopted the change regarding remediation of the acid plume.

Please refer to the Comment Response Summary, Response to Common Comment No. 5.

57. *How is it that the Joint Proposal appears not to have involved DOGM, the agency with oversight over Kennecott's Magna Tailings Impoundment? The Zone A metals plume, the product of nearly a half-century of questionable environmental management practice, is proposed to be relocated to the Magna Tailings Impoundment, if not into the Great Salt Lake.*

Response: The Division of Oil, Gas and Mining has been involved with the review and the development of the CERCLA remedial response and the Joint Proposal to the NRD Trustee as a member of the Technical Review Committee. Because of their permitting and reclamation authority over the Magna Tailings Impoundment and the North Expansion Impoundment, the DOGM will continue to be involved through the Technical Review Committee. See Response to Common Comment No. 13 of the Trustee's Comment Response Summary.

References

The documents referenced in the responses to questions are available at the following locations:

The DEQ website, <http://www.deq.utah.gov/issues/nrd/index.htm>

Utah Department of Environmental Quality
168 North 1950 West
Salt Lake City

West Jordan City Hall
8000 S. Redwood Road
West Jordan

Questions Posed to Attorney General

General Response: All questions posed to the Attorney General were also included in the "Questions Posed to Joint Group." Therefore, please refer to those responses as referenced below.

1. Why do you think it is acceptable for the public to be cleaning up the contamination caused by a private company?

Response: See response to Joint Group question No.19.

2. Why is JVWCD (Jordan Valley Water Conservancy District) a quasi-governmental agency, treating Kennecott's contamination? Could JVWCD by treating this contamination be taking on a liability caused by KUCC?

Response: See response to Joint Group question No. 4.

3. Why is the Irrevocable Letter of Credit being split to 2 letters of credit? Does this violate the consent decree which only states 1 letter of credit?

Response: See response to Joint Group question No. 6.

4. Why is the rate on the Irrevocable Letter of Credit being reduced from the Consent Decree stated rate of 7% to the Utah PTIF rate of approx. 1.5%? Could this be construed as a violation of the trustee's fiduciary duty to the State (public) as giving benefit to the polluter (Kennecott)?

Response: See response to Joint Group question No. 7.

5. How is the affected area determined? What is the equivalent benefit to the public for being impacted by the contamination.

Response: See response to Joint Group question No.10.

6. Does Kennecott receive any benefit of the acid water sent to the tailings pond?

Response: See response to Joint Group question No.12.

7. If the Joint Proposal is approved and the contaminants are sent to the Kennecott tailings pond, what happens when Kennecott shuts down and leaves?

Response: See response to Joint Group question No. 13.

8. Who is paying for the pipeline to the Kennecott tailings pond? Kennecott or the public (taxpayers and ratepayers)

Response: See the response to Joint Group question No. 14.

9. Do you believe the State should institute proceedings and reopen negotiations as available under the Consent Decree because of the abundance of new information that has surfaced regarding costs, contamination etc. showing the settlement was too little?

Response: See the response to Joint Group question No. 15.

10. Why is Jordan Valley Water Conservancy District the only purveyor considered? Have others been explored? What about the affected area?

Response: See response to Joint Group question No. 17.

*11. Has the Attorney General reviewed this Joint Proposal, Project Agreement, Agreement Among Parties and compared it to the Consent Decree?
Has he given written approval or disapproval as it relates to the Consent Decree?*

Response: See the response to Joint Group question No. 19.

12. Does the Attorney General agree that the public should be cleaning up the contamination of Kennecott, a private polluter?

Response: See the response to Joint Group No. 20.

13. Is the NRD Trustee the final authority as it relates to the acceptance or denial of the proposal?

Response: See the response to Joint Group question No. 21.

14. Is the NRD Trustee aware of any past or current violations of the Consent Decree?

Response: See the response to Joint Group question No. 22.

15. Is not the use of treated water from the low pH portion of the plume in Kennecott's tailing transport line a beneficial use of water to Kennecott by providing a portion of the transport water, violating Section V, part D, paragraph 5 of the Consent Decree. It appears that none of these waters should apply towards a credit to Kennecott.

Response: See the response to Joint Group question No. 24.

16. Section V "Covenant by Kennecott and payment to the Trustee" outlines all remedial actions to be taken. There is never a mention of any other party than Kennecott that is required to take any actions. Why then is the District jointly proposing treatment options which incorporate the use of District funds.

Response: See the response to Joint Group question No. 25.

17. When it is simply stated in the Consent Decree that Kennecott is to provide municipal quality water at no more than \$49 an acre foot, with no other financial terms, why does the Joint Proposal seem to focus on elaborate financial agreements that involve substantial investments by the District?

Response: See the response to Joint Group question No. 29.

18. What is the reason there has been no response to a request by the public for an analysis of the Consent Decree and an opinion as to compliance of the current joint proposal to the Consent Decree?

Response: See the response to Joint Group question No. 35.

19. *If it becomes apparent that yield (extraction) of water from the aquifer in the southwest quadrant of the Salt Lake Valley is NOT sustainable, can NRD Trust Fund Dollars be released to Kennecott?*

Response: See the response to Joint Group.

20. *Does JV claim rights to any of the contaminated water in the aquifer?
If so, at what point during the treatment process does JV claim ownership of the contamination?*

Response: See the response to Joint Group question No. 44.

21. *If a pipeline rupture happens to the pipe transporting contaminated water from the reverse osmosis facility to Kennecott's tailings ponds, who is responsible for any environmental liability?*

Response: See the response to Joint Group question No. 45.

22. *If it is determined that contaminated water from the JV reverse osmosis facility is allowed to be dumped into the Great Salt Lake, who is liable if, at some point in the future, it is determined that the contaminated water should not be discharged into the lake and some type of environmental fine is levied?*

Response: See the response to Joint Group question No. 46.

23. *Will the Daybreak project currently under development by Rio Tinto, Kennecott's parent company, receive treated water from JV if the reverse osmosis project is approved?*

Response: See the response to Joint Group question No. 48.

24. *How is it that the December, 2000 ROD (Record of Decision) called for treatment of the acid plume water from Kennecott's Zone A, but that was changed in the Joint Proposal to allow discharge of this hugely toxic water without treatment? What gives those preparing this proposal (and this provision still stands) the right to override the ROD?*

Response: See the response to Joint Group question No. 56.

25. *How is it that the Joint Proposal appears not to have involved DOGM, the agency with oversight over Kennecott's Magna Tailings Impoundment? The Zone A metals plume, the product of nearly a half-century of questionable environmental management practice, is proposed to be relocated to the Magna Tailings Impoundment, if not into the Great Salt Lake.*

Response: See the response to Joint Group question No. 57.

Questions Posed to KUCC

General Response: All questions posed to Kennecott Utah Copper Corporation (KUCC) were also included in the "Questions Posed to Joint Group." Therefore, please refer to those responses as referenced below.

1. *Why do you think it is acceptable for the public to be cleaning up the contamination caused by a private company?*

Response: See the response to Joint Group question No.3.

2. *Does Kennecott receive any benefit of the acid water sent to the tailings pond?*

Response: See the response to Joint Group question No.12.

3. *If the Joint Proposal is approved and the contaminants are sent to the Kennecott tailings pond, what happens when Kennecott shuts down and leaves?*

Response: See the response to Joint Group question No. 13.

4. *How much water is in the aquifer that has been contaminated by Kennecott?*

Response: See the response to Joint Group question No. 16.

5. *Why is Jordan Valley Water Conservancy District the only purveyor considered? Have others been explored? What about the affected area?*

Response: See the response to Joint Group question 17.

6. *Is not the use of treated water from the low pH portion of the plume in Kennecott's tailing transport line a beneficial use of water to Kennecott by providing a portion of the transport water, violating Section V, part D, paragraph 5 of the Consent Decree. It appears that none of these waters should apply towards a credit to Kennecott.*

Response: See the response to Joint Group question No. 24.

7. *Section V "Covenant by Kennecott and payment to the Trustee" outlines all remedial actions to be taken. There is never a mention of any other party than Kennecott that is required to take any actions. Why then is the District jointly proposing treatment options which incorporate the use of District funds.*

Response: See the response to Joint Group question No. 25.

8. *To date, how much water has been removed from the "Metals Plume"? Is water still being removed? Is the amount 400 acre feet on a five year average to comply with Section V, paragraph B of the Consent Decree?*

Response: See the response to Joint Group question No. 26.

9. *Why has there not been any consideration of REMOVAL of the waste products of concern to a controlled repository instead of discharge back to the environment?*

Response: See the response to Joint Group question No. 28.

10. When it is simply stated in the Consent Decree that Kennecott is to provide municipal quality water at no more than \$49 an acre foot, with no other financial terms, why does the Joint Proposal seem to focus on elaborate financial agreements that involve substantial investments by the District?

Response: See the response to Joint Group question No. 29.

11. Explain the relationship of Kennecott Land to Kennecott Utah Copper. If there is a direct relationship, then is not Kennecott benefiting from the treated water if Daybreak development receives water from the District?

Response: See the response to Joint Group question No. 30.

12. This Joint Proposal seems to be no more than a source development plan by the District, with only extraction and partial treatment. Where in this proposal is Kennecott solely providing restoration of the polluted groundwater to those in the Affected Area?

Response: See the response to Joint Group question No. 32.

13. Could or should not Kennecott not only be treating and replacing the groundwater, but also providing municipal quality water. In other words, these two actions need not be from the same source, as in the Joint Proposal. Kennecott could treat the groundwater and re-inject it AND provide municipal quality water from their own sources of water in or around their operations.

Response: See the response to Joint Group question No. 33.

14. What is the expected cost (per acre foot) for only pre-treatment and just treatment of Kennecott's contaminated groundwater, exclusive of capital costs and water conveyance?

Response: See the response to Joint Group question No. 34.

15. Is there enough hydrogeologic data available to support a decision to extract an additional 7,000 acre feet of groundwater from the southwest quadrant of the Salt Lake Valley?

Response: See the response to Joint Group question No. 39.

16. Do Kennecott's existing permits allow receipt and storage of contaminated water from a third-party such as JV?

Response: See the response to Joint Group question No. 42.

17. If Kennecott receives contaminated water from JV, will Kennecott, at some point, need to expand the ponds to allow for increased inflow?

Response: See the response to Joint Group question 43.

18. If a pipeline rupture happens to the pipe transporting contaminated water from the reverse osmosis facility to Kennecott's tailings ponds, who is responsible for any environmental liability?

Response: See the response to Joint Group question No. 45.

19. Will the Daybreak project currently under development by Rio Tinto, Kennecott's parent company, receive treated water from JV if the reverse osmosis project is approved?

Response: See the response to Joint Group question No. 48.

20. Will you please provide the contracts associated with water deliveries/sales to Daybreak, Rio Tinto, Kennecott, or any other Rio Tinto affiliate.

Response: See the response to Joint Group question No. 51.

21. What is the alternate water supply for Daybreak if JV cannot deliver the requested amount?

Response: See the response to Joint Group question No. 52.

Questions Posed to JVWCD

General Response: All questions posed to Jordan Valley Water Conservancy District (JVWCD) were also included in the "Questions Posed to Joint Group." Therefore, please refer to those responses as referenced below.

1. *How much additional cost will be transferred to the ratepayers and taxpayers under this Joint Proposal?*

Response: See the response to Joint Group question No. 2.

2. *Why do you think it is acceptable for the public to be cleaning up the contamination caused by a private company?*

Response: See the response to Joint Group question No. 3.

3. *Why is JVWCD (Jordan Valley Water Conservancy District) a quasi-governmental agency, treating Kennecott's contamination? Could JVWCD by treating this contamination be taking on a liability caused by KUCC?*

Response: See the response to Joint Group question No. 4.

4. *Why is JVWCD reimbursing KUCC its capital costs to treat KUCC's contamination? Project Agreement sections 10.1 (b),(c) 11.2(c)*

Response: See the response to Joint Group question No. 5.

5. *How much water is required to provide the 8235 acre feet per year of municipal quality water to the affected area? Executive summary 1.1*

Response: See the response to Joint Group question No. 8.

6. *Why is there a discrepancy between the executive summary 1.1 and section 2.1 of the Joint Proposal which says that by treating with the Reverse Osmosis process at 85% efficiency that the Joint Proposal will provide 7000 ac ft/yr. Which is it 7000 or 8235?*

Response: See the response to Joint Group question No. 9.

7. *Why is the reverse osmosis process the preferred method of treatment if it is only up to 85% efficient?*

Response: See the response to Joint Group question No. 11.

8. *Who is paying for the pipeline to the Kennecott tailings pond? Kennecott or the public (taxpayers and ratepayers)*

Response: See the response to Joint Group question No 14.

9. *How much water is in the aquifer that has been contaminated by Kennecott?*

Response: See the response to Joint Group question No. 16.

10. *Why is Jordan Valley Water Conservancy District the only purveyor considered? Have others been explored? What about the affected area?*

Response: See the response to Joint Group question No. 17.

11. *What did Jordan Valley Water Conservancy District do with the settlement they received from the Consent Decree? Was it put to beneficial use for the public (ratepayers) to deal with this contamination?*

Response: See the response to Joint Group question No. 18.

12. *Section V "Covenant by Kennecott and payment to the Trustee" outlines all remedial actions to be taken. There is never a mention of any other party than Kennecott that is required to take any actions. Why then is the District jointly proposing treatment options which incorporate the use of District funds.*

Response: See the response to Joint Group question No. 25.

13. *With the proposal, are not the waste products still simply being discharged to the Great Salt Lake only with increased expense to the District to construct a waste line to Kennecott's tailings pond?*

Response: See the response to Joint Group question No. 27.

14. *Why has there not been any consideration of REMOVAL of the waste products of concern to a controlled repository instead of discharge back to the environment?*

Response: See the response to Joint Group question No. 28.

15. *When it is simply stated in the Consent Decree that Kennecott is to provide municipal quality water at no more than \$49 an acre foot, with no other financial terms, why does the Joint Proposal seem to focus on elaborate financial agreements that involve substantial investments by the District?*

Response: See the response to Joint Group question No. 29.

16. *This Joint Proposal seems to be no more than a source development plan by the District, with only extraction and partial treatment. Where in this proposal is Kennecott solely providing restoration of the polluted groundwater to those in the Affected Area?*

Response: See the response to Joint Group question no. 32.

17. *What is the expected cost (per acre foot) for only pre-treatment and just treatment of Kennecott's contaminated groundwater, exclusive of capital costs and water conveyance?*

Response: See the response to Joint Group question No. 34.

18. *Is there enough hydrogeologic data available to support a decision to extract an additional 7,000 acre feet of groundwater from the southwest quadrant of the Salt Lake Valley?*

Response: See the response to Joint Group question No. 39.

19. *Would JV's customers need to incur costs to build a pipeline to the Great Salt Lake if the groundwater was not contaminated?*

Response: See the response to Joint Group question No. 40.

20. *Would JV's customers need to incur costs to build a reverse osmosis plant if the groundwater was not contaminated by Kennecott?*

Response: See the response to Joint Group question No. 41.

21. *Would JV's customers need to incur costs to drill and pay for monitoring wells and other infrastructure to monitor the contamination plume if there was no groundwater contamination?*

Response: See the response to Joint Group question No. 42-1.

22. *Do Kennecott's existing permits allow receipt and storage of contaminated water from a third-party such as JV?*

Response: See the response to Joint Group question No. 42-2.

23. *Does JV claim rights to any of the contaminated water in the aquifer?
If so, at what point during the treatment process does JV claim ownership of the contamination?*

Response: See the response to Joint Group question No. 44.

24. *If a pipeline rupture happens to the pipe transporting contaminated water from the reverse osmosis facility to Kennecott's tailings ponds, who is responsible for any environmental liability?*

Response: See the response to Joint Group question No. 45.

25. *If it is determined that contaminated water from the JV reverse osmosis facility is allowed to be dumped into the Great Salt Lake, who is liable if, at some point in the future, it is determined that the contaminated water should not be discharged into the lake and some type of environmental fine is levied?*

Response: See the response to Joint Group question No. 46.

26. *Will the Daybreak project currently under development by Rio Tinto, Kennecott's parent company, receive treated water from JV if the reverse osmosis project is approved?*

Response: See the response to Joint Group question No. 48.

27. *What price per AF will Daybreak pay for water received from JV?*

Response: See the response to Joint Group question No. 49.

28. *How does this price compare with prices charged to JV's other customers?*

Response: See the response to Joint Group question No. 50.

29. *Will you please provide the contracts associated with water deliveries/sales to Daybreak, Rio Tinto, Kennecott, or any other Rio Tinto affiliate.*

Response: See the response to Joint Group question No. 51.

30. *What is the alternate water supply for Daybreak if JV cannot deliver the requested amount?*

Response: See the response to Joint Group question No. 52.

31. *Has JV entered into any contracts with any supplier, contractor, or vendor that have breakage fees or liquidated damages associated with schedule delays if JV does not start and finish construction and commercial operation of the reverse osmosis facility by a certain date or within a certain timeframe?*

Response: See the response to Joint Group question No. 53.

32. *Who is liable for an schedule delays and cost overruns for the JV reverse osmosis plant?*

Response: See the response to Joint Group question No. 54.

33. *Will you please provide any contracts and agreements with any vendor, equipment supplier, or contractor regarding the proposed reverse osmosis plant.*

Response: See the response to Joint Group question No. 55.

September 20, 2004

Mr. Tom Belchak
LANCE Consulting Group, L.C.
1780 W. 9000 S. Suite 301
West Jordan, UT, 84088

Dear Mr. Belchak,

RE: Responses to Questions Submitted to the State Trustee for Natural Resources,
Kennecott Utah Copper Corporation, Jordan Valley Water Conservancy District, and the
Utah Attorney General's Office

On August 24, 2004, the State Trustee for Natural Resources received 4 sets of questions from Lance Consulting, L.C., regarding the Southwest Jordan Valley groundwater cleanup project. Responses to your questions are provided in the attached document. Since all of the questions in the sets for the Attorney General's Office, Kennecott, and Jordan Valley Water Conservancy District were also included in the Joint set, we have provided answers in the Joint question set and cross-referenced answers in the other question sets. Also included with this letter is a copy of the Response to Common Comments portion of the Trustee's Comment Response Summary.

As you know, on August 31, 2004, the Trustee announced her decision to approve the Joint Proposal for groundwater cleanup and released the Comment Response Summary and Findings and Conclusions documents. A number of the questions you provided are also addressed in the Trustee's Findings and Conclusions and the Comment Response Summary. These and related documents are posted on the DEQ website <http://www.deq.utah.gov/issues/nrd/index.htm> and are also available in the document repositories at the West Jordan City Hall and the Utah Dept. of Environmental Quality.

If you have any questions, please let us know or call Douglas Bacon at (801) 536-4282 for assistance.

Sincerely,

Dianne R. Nielson, Ph.D.
Trustee for Natural Resources
State of Utah

Richard Bay
Assistant General Manager
Jordan Valley Water Conservancy District

Fred Nelson, Esq.
Office of the Attorney General
State of Utah

Paula Doughty
Director, Environmental Affairs
Kennecott Utah Copper Corporation

Attachments
cc. Doug Bacon, DEQ

September 14, 2004

[Merge Letter Format]
The Honorable
Utah Legislative Management Committee

Dear ,

RE: Responses to Questions Submitted to the State Trustee for Natural Resources, Kennecott
Utah Copper Corporation, Jordan Valley Water Conservancy District, and the Utah Attorney
General's Office

Thank you for the opportunity to brief the Legislative Management Committee on August 18, 2004,
regarding the proposal to cleanup groundwater contamination and provide municipal-quality drinking
water in the southern portion of the Salt Lake valley. At that time, the Legislative Management
Committee expressed interest in assuring that a citizen's questions were addressed regarding the
Southwest Jordan Valley groundwater cleanup proposal. The response to those questions is attached.

If you have questions or need additional information, please contact us:

Trustee – Dianne Nielson, 801-536-4404
Attorney General's Office – Fred Nelson, 801-366-0290
Kennecott – Paula Doughty, 801-569-7120
Jordan Valley Water Conservancy District – Richard Bay, 801-565-4300

Thank you for your continued interest in the project.

Best regards,

Dianne R. Nielson, Ph.D.
Trustee for Natural Resources
State of Utah

Attachment

cc. Michael Christensen, Legislative Research and General Council
Fred Nelson, Utah Attorney General's Office
Paula Doughty, Kennecott
Richard Bay, Jordan Valley Water Conservancy District
Doug Bacon, DEQ

FORUM MEMBERS

- (2) AREA WELL OWNERS
 - 1 - Betty Naylor
 - 2 - Richard Schmidt
- (2) ENVIRONMENTAL
 - 1 - Great Salt Lake Alliance - Maunsel Pierce
(Alternate) - Lynn deFreitas, Friends of the Great Salt Lake
 - 2 - Wasatch Clean Air Coalition - Kathy Vandame
- (1) DUCK CLUB
 - 1 - Dick West of Westside Duck Club
(Alternate) - Kent Covey from New State Duck Club
- (6) LOCAL GOVERNMENT
 - 1 - Copperton - Russell Ray
 - 2 - Herriman City - Mayor Lynn Crane
 - 3 - South Jordan City - Jennifer Smith, City Water Engineer
 - 4 - City of West Jordan - Roger Payne, Public Works
 - 5 - Riverton City - Scott Hill, Public Works
 - 6 - Salt Lake County - Councilman Mike Jensen
(Alternate) Ryan Perry, Administrative Assistant
- (3) FEDERAL AGENCY
 - 1 - EPA - Eva Hoffman
 - 2 - USGS - Bert Stolp
 - 3 - US Fish and Wildlife - Bruce Waddell
- (3) STATE AGENCY
 - 1 - DEQ - Dianne Nielson
 - 2 - DOGM - Tom Munson
 - 3 - State Engineer/Water Rights - Jared Manning
- GROUNDWATER REMEDIATION JOINT PROPOSAL PARTIES
 - Jordan Valley Water Conservancy District - Richard Bay
 - Kennecott Utah Copper Corporation - Paula Doughty

KENNECOTT SOUTH-END TRC MEMBERS

<u>Affiliation</u>	<u>Name</u>
DEQ/DERR	Doug Bacon (co-chair)
DEQ/DERR	Brent Everett
DEQ/DWQ	Dan Hall
DEQ/DWQ	Jennifer Robinson
DEQ/DWQ	Harry Campbell
DEQ/DWQ	Bill Moellmer
DEQ/DDW	Frank Roberts
DEQ/DSHW	David Mcclary
DNR/DOGM	Doug Jensen
DNR/DOGM	Tom Munson
DNR/DWR	Jared Manning
DNR/FFSL	Karl Kappe
EPA Region VIII	Eva Hoffman, Ph.D. (co-chair)
EPA Region VIII	Helen Dawson
U.S. A.C.E.	Mark Wichman
U.S.G.S.	Bert Stolp
U.S. F.W.S.	Bruce Waddell
KUCC	Kelly Payne (co-chair)
KUCC	Paula Doughty
KUCC	Helmar Bayer
KUCC	Ryan Evans
KUCC	Brian Vinton
KUCC	Mark Logsdon
JVWCD	Richard Bay
JVWCD	Mark Attencio
JVWCD	Alan Packard
City of Herriman	Michelle Baguley
City of Herriman	Mayor Lynn Crane
City of West Jordan	David Murphy
City of West Jordan	Roger Pain
City of South Jordan	Steve Noble
City of Riverton	Scott Hill
Salt Lake Valley Health Dept.	Marry Pat Buckman
Friends of the Great Salt Lake	Joy Emory
Sierra Club	Scott Endicott